

WHAT IS CLAIMED IS:

1. An apparatus for finishing a zone on the surface of an article of manufacture, said surface comprising a plurality of adjacent and contiguous zones, which comprises:
 - 5 means for supporting a rigid abrasive surface; an inflexible, abrasive surface supported on the means for supporting;
said abrasive surface having
 - (i) a cross-sectional profile which is a negative image of a profile of the zone to be finished; and
 - (ii) a relief corresponding to the zone or zones to remain unfinished.
 - 10 2. The apparatus of claim 1, wherein the means for supporting is a block.
 3. The apparatus of claim 1, wherein the abrasive surface is aluminum oxide.
 4. The apparatus of claim 1 wherein the means for supporting and the abrasive surface comprise the same materials.
 5. The apparatus of claim 4 wherein the abrasive surface is an exposed surface of the means for supporting.
 - 10 6. A sharpening and shaping device for surgical instruments, comprising a block of hardened, abrasives material designed to abrade, cut or otherwise shape metal surfaces of said instruments, said block having a generally flat top surface containing at least one sharpening and shaping groove disposed therein, said at least one groove receiving a distal end of said instrument for the purpose of
 - 15 sharpening and shaping said distal end when said instrument is drawn through said groove, said at least one groove having an active cutting surface for

shaping said distal end, and a relief surface for guiding said distal end in a non-cutting mode.

7. The sharpening and shaping device in accordance with claim 6, wherein said active cutting surface is disposed adjacent said relief surface.

8. The sharpening and shaping device in accordance with claim 4, wherein said active cutting surface is disposed above said relief surface.

9. The sharpening and shaping device in accordance with claim 6, wherein said active cutting surface comprises a curvilinear-shaped wall.

10. The sharpening and shaping device in accordance with claim 6, wherein said active cutting surface comprises a V-shaped wall.

11. The sharpening and shaping device in accordance with claim 6, wherein said relief surface comprises a V-shaped wall.

12. The sharpening and shaping device in accordance with claim 6, wherein said relief surface comprises a curvilinear-shaped wall.

13. The sharpening and shaping device in accordance with claim 6, wherein said relief surface comprises a square-shaped wall.

14. The sharpening and shaping device in accordance with claim 4, wherein two grooves are disposed in said generally flat top surface of said block.

15. The sharpening and shaping device in accordance with claim 14, wherein one of said two grooves disposed in said generally flat top surface of said block has a different size than does its companion groove.

16. A sharpening and shaping device for surgical instruments, said instruments having cutting surfaces that need finishing, said dental

instruments being selected from a group consisting of
5 curets, sickles, hoes, probes, explorers and scalers,
said device comprising a block of hardened abrasive
material designed to abrade, cut or otherwise shape
surfaces of said instruments, said block having a
generally flat top surface containing at least one
10 sharpening and shaping groove disposed therein, said
at least one groove receiving a distal end of said
instrument for the purpose of sharpening and shaping
said end when said instrument is drawn through said
groove, said at least one groove having an active
15 cutting surface and a relief surface for shaping said
distal end.

17. The sharpening and shaping device in
accordance with claim 16, wherein said active cutting
surface is disposed adjacent to said relief surface.

18. The sharpening and shaping device in
accordance with claim 16, wherein said active cutting
surface is disposed above said second relief surface.

19. The sharpening and shaping device in
accordance with claim 16, wherein said active cutting
surface comprises a curvilinear-shaped wall.

20. The sharpening and shaping device in
accordance with claim 16, wherein said active cutting
surface comprises a V-shaped wall.

21. The sharpening and shaping device in
accordance with claim 16, wherein said relief surface
comprises a V-shaped wall.

22. The sharpening and shaping device in
accordance with claim 16, wherein said relief surface
comprises a curvilinear-shaped wall.

23. The sharpening and shaping device in
accordance with claim 16, wherein said relief surface
comprises a square-shaped wall.

24. The sharpening and shaping device in accordance with claim 16, wherein two grooves are disposed in said generally flat top surface of said block.

25. The sharpening and shaping device in accordance with claim 24, wherein one of said two grooves disposed in said generally flat top surface of said block, has a different size than does its 5 companion groove.

26. A finishing device for tools' surfaces comprising; a block designed to abrade, cut or otherwise finish surfaces of said tools, said block having single or multipieced components which, when 5 brought together, form a single block structure containing a finishing cavity, disposed therein, said cavity comprising at least a portion of a negative image surface of a portion of said tool to be finished, said at least one groove receiving a distal 10 end of said tool or instrument for the purpose of finishing said distal end when said tool is moved relative to said groove, said at least one groove having an active, cutting surface for finishing said distal end.

27. The sharpening and shaping device in accordance with claim 26, wherein said active, cutting surface is disposed adjacent to a relief surface for capturing cutting residues or discharging 5 residues from said tool.

28. The sharpening and shaping device in accordance with claim 26, wherein said active, cutting surface comprises a curvilinear-shaped wall.

29. A finishing device for surfaces of objects, comprising a surface of hardened, abrasive material designed to abrade, cut or otherwise finish surfaces of said objects, said device having means defining at

ROUTINE 64183660

- 5 least one cavity, said cavity containing at least one finishing groove disposed therein that comprises a negative image of a portion of the object to be finished, said at least one groove receiving said object for the purpose of finishing said at least one
- 10 groove having an active, abrasive surface for finishing said object.